

## CLAIMS

[1] An actuator for a pickup, comprising:

a fixed portion;

5 a movable portion movable in each of a focusing direction extending along an optical axis of an objective lens and in a tracking direction substantially perpendicular to the focusing direction, for holding the objective lens; and

a plurality of linear elastic members of five or more each having ends connected to the movable portion and the fixed portion, respectively,

10 wherein the plurality of linear elastic members have connection portions on a side of the fixed portion which are located on a first virtual circle, and connection portions on a side of the movable portion which are located on a second virtual circle.

[2] The actuator for the pickup according to Claim 1, wherein the plurality of linear elastic members extend in parallel to one another.

[3] The actuator for the pickup according to Claim 1, wherein:

15 the linear elastic members that are adjacent to each other when viewed from the focusing direction are designed such that a dimension between the connection portions connected to the fixed portion is different from a dimension between the connection portions connected to the movable portion; and

20 the linear elastic members that are adjacent to each other when viewed from the tracking direction are designed such that a dimension between the connection portions connected to the fixed portion is different from a dimension between the connection portions connected to the movable portion.

[4] The actuator for the pickup according to any one of Claims 1 to 3, further comprising six of the linear elastic members.

25 [5] An actuator for a pickup, comprising:

a fixed portion;

a movable portion movable in each of a focusing direction extending along an optical axis of an objective lens and in a tracking direction substantially perpendicular to the focusing direction, for holding the objective lens; and

a plurality of linear elastic members of four or more each having ends connected to the movable portion and the fixed portion, respectively, wherein:

the linear elastic members that are adjacent to each other when viewed from the focusing direction are designed such that a dimension between connection portions of the linear elastic members connected to the fixed portion is different from a dimension between connection portions of the linear elastic members connected to the movable portion;

the linear elastic members that are adjacent to each other when viewed from the tracking direction are designed such that a dimension between connection portions of the linear elastic members connected to the fixed portion is different from a dimension between connection portions of the linear elastic members connected to the movable portion;

the connection portions of the plurality of linear elastic members on a side of the fixed portion are located on a first virtual circle;

the connection portions of the plurality of linear elastic members on a side of the movable portion are located on a second virtual circle that is different from the first virtual circle; and

the two virtual circles have a virtual center line connecting centers thereof to each other, the virtual center line intersecting at a single point with virtual extended lines extending in a longitudinal direction of the plurality of linear elastic members.

[6] The actuator for the pickup according to Claim 5, further comprising four of the linear elastic members.

[7] A pickup device, comprising the actuator for the pickup according to any one of Claims 1 to 6 and an actuator drive portion for driving the actuator for a pickup.

[8] A recording medium drive device, comprising the pickup device according to Claim 5.

[9] A method of producing an actuator for a pickup comprising a fixed portion, a movable portion movable in each of a focusing direction extending along an optical axis of an objective lens and in a tracking direction substantially perpendicular to the focusing

direction, for holding the objective lens, and a plurality of linear elastic members of five or more each having ends connected to the movable portion and the fixed portion, respectively,

the method comprising the steps of:

5        locating connection portions of the plurality of linear elastic members on a side of the fixed portion on a first virtual circle; and

      locating connection portions of the plurality of linear elastic members on a side of the movable portion on a second virtual circle.

[10]    A method of producing an actuator for a pickup comprising a fixed portion, a  
10        movable portion movable in each of a focusing direction extending along an optical axis of an objective lens and in a tracking direction substantially perpendicular to the focusing direction, for holding the objective lens, and a plurality of linear elastic members of four or more each having ends connected to the movable portion and the fixed portion, respectively,

15        the method comprising the steps of:

      disposing the linear elastic members that are adjacent to each other when viewed from the focusing direction such that a dimension between connection portions of the linear elastic members connected to the fixed portion is different from a dimension between connection portions of the linear elastic members connected to the movable  
20        portion, in connecting the plurality of linear elastic members to the fixed portion and the movable portion;

      disposing the linear elastic members that are adjacent to each other when viewed from the tracking direction such that a dimension between connection portions of the linear elastic members connected to the fixed portion is different from a dimension  
25        between connection portions of the linear elastic members connected to the movable portion, in connecting the plurality of linear elastic members to the fixed portion and the movable portion;

      locating the connection portions of the plurality of linear elastic members on a side of the fixed portion on a first virtual circle;

locating the connection portions of the plurality of linear elastic members on a side of the movable portion on a second virtual circle that is different from the first virtual circle; and

5 disposing the plurality of linear elastic members such that a virtual center line connecting centers of the two virtual circles to each other intersects at a single point with virtual extended lines extending in a longitudinal direction of the plurality of linear elastic members.

[11] The method of producing the actuator for the pickup according to Claim 9 or 10, further comprising the steps of:

10 installing the linear elastic members in a mold for molding the fixed portion and the movable portion; and

injecting a molten resin from an injection port of the mold to insert-mold the actuator for a pickup.